## CHIEF MOHAMED JARI SECONDARY SCHOOL TERM TWO 2017 END OF TERM EXAMINATION ENGLISH FORM TWO

## INSTRUCTION: Answer all questions SECTION A(25MRK)

1. Name the instrument and state their reaching

2) Fatuma used the instrument in b above to take measurement of the diameter of a thin wire. If the instrument had an error of +0.01 mm. (2mrk)

3a) Define friction

b) State 4 three effect of force

4. A van of mass 2500kg is authorized to carry 14 passengers, If the average mass per passage is 50kg,Calculate :

a) The weight of the van

(1mrk)

(3mrk)

(2mrk)

(4mrk)

b)The weight of the all passengers	(2mrk)
c) The total weight of the van and the passengers	(2mrk)
5a) Define Hooks law	(1mrk)
b)Explain why water wet glass	(1mrk)
6. Explain two factors affecting surface tension	(4mrk)
7. Define electric current and state SI unit	(2mrk)
8.Reflect the object below by indicating its image	(2mrk)

## **SECTION B (45MRKS)**

9a)Define Electrostatic	(1mrk)
b)State the basic law of electrostatics	(1mrk)
c)Glass is rubbed with silk, What charges do the two material acquire	(2mrk)
d)What are conductors and insulators? Give an example of each	(4mrk)
e)Distinguish between lunar and solar eclipses	(2mrk)
10a)Define refraction of light	(1mrk)
b)State two laws of refraction	(1mrk)

c)A ray of light is incidents an air/glass boundary as shown below.Find the refractive index for glass with respect to air. (2mrk)

d) Show that  $_{2}n_{1}=\frac{1}{n}$ 

e)Define total internal reflection

f) A ray of height passes from a certain liquid into air, The velocity of height is  $2.4 \times 10^8$  mls in the liquid and  $3.0 \times 10^8$  mls in air.

i) Draw a ray diagram to show the path of the ray of height as it travel from the liquid to air (1mrk)

ii)Calculate the critical angle for the liquid

11a) Distinguish between the following terms speed and velocity (2mrk)

b)State the quantity represent by the gradient in the following motion –time graphs (6mrk)

(3mrk)

(1mrk)

(1mrk)



c)The figure below is a velocity -time graph



i)Calculate the distance travelled in the first 40second

(3mrk)

ii)Calculate the accelerator along BC

(3mrk)

13a) Define viscously	(1mrk)
b) State two disadvantage of friction in machines	(2mrk)

c)A bullet of mass 20g travelling at 60mls stripes a trolley of mass 0.98kg resting on a smooth horizontal surface, The trolley and the bullet more together after collision

(2mrk)

i)Find the common velocity after impact

ii) Calculate the initial and final lanetic system energies of the system (2mrk)